From:

"Galacatos, Katerina SPN" <Katerina.Galacatos@usace.army.mil>

To:

"Peter Baye" <baye@earthlink.net>

CC:

"Martel, Daniel J SPN" < Daniel.J.Martel@usace.army.mil>, "Hicks, Jane M ...

Date:

Friday, February 05, 2010 2:17 PM

Subject:

RE: Redwood City ex-bittern pond 9 summer 2009 aerial photo of fill area

Dear Peter,

Thank you for the additional information and memorandum.

Sincerely,

Katerina Galacatos

----Original Message-----

From: Peter Baye [mailto:baye@earthlink.net] Sent: Friday, February 05, 2010 12:54 PM

To: Galacatos, Katerina SPN

Cc: Martel, Daniel J SPN; Hicks, Jane M SPN; strauss.alexis@epa.gov;

AGreenberg@waterboards.ca.gov; BWolfe@waterboards.ca.gov;

KLichten@waterboards.ca.gov; SRLei@waterboards.ca.gov

Subject: Redwood City ex-bittern pond 9 summer 2009 aerial photo of fill area

Katerina,

I obtained a summer 2009 aerial photo of Redwood City salt ponds including the former bittern pond 9, showing the extent and pattern of fill and excavation that was already completed by that time. Please review the attached memorandum, which includes the photo. Please include this and my previous memoradum in the administrative record for jurisdiction, permit, or enforcement actions of this site.

I hope your investigation will include exploration of the possible effects of the cut and fill on potential remediation of the former bittern pond in a pre-application context for teh proposed Saltworks urban development, including:

- * potential effects on bittern solid remediation options,
- * stabilization of bittern solids buried under or within impermeable clay-silt bay mud sediments (potential effects on benthic invertebrates in possible future tidal conditions under elevated sea level),
- * consequences for CEQA, CWA Sec. 404 and NEPA evaluation of alternatives and irretrievable commitment of resources,
- * consequences for impact and mitigation assessment in relation to environmental "baseline" conditions under CEQA,
- * equitability of impact and mitigation or alternative evaluations for after-the-fact authorization versus standard permits or enforcement actions
- * consequences for ecological attributes of drained bittern ponds with unprecedented topographic roughness, terms of jurisdictional determination and shorebird roost habitat capacity.

Thanks for your attention. If I can provide further information of use to

you, please contact me. Peter Baye



(415) 310-5109

Peter R. Baye, Ph.D. Botanist, Coastal Ecologist P.O. Box 65, Annapolis, California 95412



baye@earthlink.net

MEMORANDUM

To: Katerina Galacatos, U.S. Army Corps of Engineers, San Francisco District, Regulatory katerina.galacatos@usace.army.mil

Cc: Dan Martel, U.S. Army Corps of Engineers, San Francisco District, Regulatory daniel.j.martel@usace.armv.mil,

Jane Hicks, U.S. Army Corps of Engineers, San Francisco District, Regulatory (Chief) jane.m.hicks@usace.army.mil,

Alexis Straus, EPA Region 9, strauss.alexis@epa.gov

Andree Greenberg, San Francisco Bay Regional Water Quality Control Board,

AGreenberg@waterboards.ca.gov

Bruce Wolfe, San Francisco Bay Regional Water Quality Control Board,

BWolfe@waterboards.ca.gov

Keith Lichten, San Francisco Bay Regional Water Quality Control Board,

KLichten@waterboards.ca.gov

Shin-Ro Lei, San Francisco Bay Regional Water Quality Control Board,

SRLei@waterboards.ca.gov

Date: February 5, 2010

SUBJECT: Redwood City salt ponds (9, 9a,) fill and excavation activity: summer 2009 aerial photography showing extent of fill and excavation activity

Hello again, Katerina.

I am providing supplemental information on the Redwood City bittern pond 9 and 9A fill and excavation activity. I obtained a photo of the salt ponds from 2009 NAIP imagery, which was collected sometime last summer (unspecified date in between May 21 and Aug 7), provided by Christina Toms of Wetlands and Water Resources, San Rafael. The image is pasted below in this memorandum. As you can see, my estimate of the magnitude of the bed area affected, based on high tide views over the perimeter levee from a boat, was fairly accurate: it appears to cover dozens of acres, in a zone defined by a diagonal berm or boundary across Pond 9. The pattern of cut and fill is in parallel adjacent rows of excavation and side-cast spoils, analogous with agricultural deep plowing or deep-ripping, as I described. New internal drainage ditch patterns appear to have been constructed. Relict prehistoric tidal creek topography has been eliminated, in contrast with untreated beds with visible relict

Peter R. Baye Ph.D. Coastal Ecologist, Botanist, <u>baye@earthlink.net</u> (415) 310-5109 P.O. Box 65, Annapolis, California 95412 creek patterning. The prehistoric tidal marsh stratigraphy (marsh soil profile) has also been destroyed within the cut/fill zone. Note also that bittern liquids appear to have been drained from Pond 9 and adjacent Pond 7 pickle ponds. These ponds were shallow-flooded at the time of my January 29 high tide observations, probably due to either rainwater retention or rainwater plus tidal overtopping from December spring tides with some runup or storm surge.

I have cc'ed additional agency staff and management who have expressed interest in these observations.

Peter Baye

